

1. A near object detection system comprising:
a plurality of sensors, each of the sensors for providing detection coverage in a predetermined coverage zone and each of the sensors comprising:
a transmit antenna for transmitting a first RF signal;
a receive antenna for receiving a second RF signal; and
a receiver circuit, coupled to said received antenna; and
means for sharing information between each of the plurality of sensors.
2. The system of claim 1 wherein said means for sharing information between each of the plurality of sensors comprises a central sensor processor coupled to each of said plurality of sensors.
3. The system of claim 1 wherein said means for sharing information between each of the plurality of sensors comprises:
a sensor processor disposed in each of said sensor circuits; and
communication means for allowing information to be shared between the sensor processors.
4. A near object detection system for a vehicle, comprising:
a plurality of sensors, each of the sensors for providing detection coverage in respective coverage zones disposed about a perimeter of the vehicle,
wherein each of the sensors has a predetermined range, angular extent, and velocity range based upon respective coverage zone requirements.
5. The system according to claim 4, wherein the coverage zones include two or more of adaptive cruise control/night vision zone, lane keeping zone, road departure zone, side object detection zone, backup and parking aid zone, and stop and go zone.
6. A near object detection system, comprising:
a plurality of sensors, each of the sensors for providing detection coverage in a

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predetermined coverage zone;

a multiple hypothesis tracker for processing data from the plurality of sensors to make a hypothesis about data association, resolution, and/or data quality;

a prediction filter coupled to the multiple hypothesis tracker for scheduling the plurality of sensors;

a public track former including a discrimination processor for generating data to control operation of the plurality of sensors;

an estimator/best state vector subsystem coupled to the public track former; and

a vehicle control crash management interface coupled to the estimator/best state vector subsystem and to the discrimination processor.

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